

We Claim:

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- 1. In a computer system, a method comprising the steps of:

 providing a PSDL parser capable of extracting a print job from a PSDL file;
 automatically converting a print job stored in a PSDL file into a proposed
 workflow for a printshop using said PSDL parser and resource knowledge recording
 resources in said printshop.

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- 2. The method of claim 1 further comprising the step of:executing said print job in said printshop using said proposed workflow.
 - 3. The method of claim 1 wherein said PSDL parser traverses said print job in said PSDL file and extracts the job resource requirements for said print job from said file.
- 4. The method of claim 1 wherein said resource knowledge includes information regarding the availability in said printshop of available machines, machine operators, work-in-progress and inter-process storage buffer levels and materials required to process said print job.
- 20 5. The method of claim 1 wherein said proposed workflow is used to generate a job cost estimate.
 - 6. The method of claim 5 wherein said job cost estimate includes material costs and labor costs.
 - 7. The method of claim 6 wherein said proposed workflow and said job cost estimate are transmitted to a job submitter that submitted the print job for approval prior to processing said print job.
- 30 8. The method of claim 7, further comprising the steps of:



said job submitter substituting new materials to replace materials included in said proposed workflow;

creating a new proposed workflow which includes said new materials; generating a new job cost estimate for said new proposed workflow; and transmitting said new job cost estimate and said new proposed workflow to said job submitter for approval.

9. The method of claim 7, further comprising the steps of:

said job submitter substituting new machines to replace machines included in said proposed workflow;

creating a new proposed workflow which includes said new machines;
generating a new job cost estimate for said new proposed workflow; and
transmitting said new job cost estimate and said new proposed workflow to said
job submitter for approval.

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10. The method of claim 7, further comprising the steps of:

said job submitter substituting new machine operators to replace operators included in said proposed workflow;

creating a new proposed workflow which includes said new machine operators;
generating a new job cost estimate for said new proposed workflow; and
transmitting said new job cost estimate and said new proposed workflow to said
job submitter for approval.

- 11. The method of claim 1, wherein said PSDL file is a Print Production Format (PPF) file.
- 12. The method of claim 1, wherein said PSDL file is a JDF file.
- 13. The method of claim 1, wherein said PSDL file is a PCX file.

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14. In a computer system, a method comprising the steps of:

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submitting a print job to a printshop having resources, said print job stored in a printshop job description language (PSDL) file; and

automatically converting said print job stored in said PSDL file into a proposed workflow for said printshop, said proposed workflow dividing said print job into components and mapping said components of said print job to available resources of said printshop so as to set the buffer space between machines to optimal levels while processing said print job.

- 15. The method of claim 14 further comprising the step of: executing said print job in said printshop using said proposed workflow.
- 16. The method of claim 14 wherein said resource knowledge includes information regarding availability in said printshop of machines, machine operators, and materials used in processing said print job.
- 17. The method of claim 14 wherein said resource knowledge further includes information regarding operational speed and capactiy of machines in said printshop used in processing said print job.
- 20 18. In a computer system containing a network interface, said system connected to the a network via said network interface, a method comprising the steps of:

providing a print job submitted by a job submitter and stored in a printshop job description language (PSDL) file located on a remotely located computer system that is connected to the network;

sending said print job stored in said PSDL file from said remotely located computer system to a printshop via the network and said network interface;

automatically converting said PSDL file into a proposed workflow for said printshop using a PSDL parser and resource knowledge regarding resources in the printshop.

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- 19. The method of claim 18 further comprising the step of: executing said print job in said printshop using said proposed workflow.
- 20. The method of claim 18 wherein said network is the Internet.
- 21. The method of claim 18 wherein said resource knowledge includes information regarding the availability in said printshop of machines, machine operators, and materials used in processing said print job.
- 10 22. The method of claim 18 wherein said proposed workflow is used to generate a job cost estimate.
 - 23. The method of claim 18 wherein said job cost estimate includes material costs and labor costs.

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- 24. The method of claim 23 wherein said proposed workflow and said job cost estimate are transmitted to said job submitter via the Internet for approval prior to said print job being processed.
- 25. The method of claim 24, further comprising the step of: generating a new proposed workflow and new job cost estimate in response to said job submitter rejecting said proposed workflow and said job cost estimate.
- 26. In a computer system, a medium holding computer-executable instructions for amethod, said method comprising the steps of:

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providing a PSDL parser capable of extracting a print job from a PSDL file; automatically converting a print job stored in a PSDL file into a proposed workflow for a printshop using said PSDL parser and resource knowledge recording resources in said printshop.

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27. A medium for use with a computer system, said medium holding computerexecutable instructions for a method, said method comprising the steps of:

submitting a print job to a printshop having resources, said print job stored in a printshop job description language (PSDL) file; and

automatically converting said print job stored in said PSDL file into a proposed workflow for said printshop, said proposed workflow dividing said print job into components and mapping said components of said print job to available resources of said printshop so as to set the buffer space between machines to optimal levels while processing said print job.